

Law and Human Behavior

Interrogations, Confessions, and Guilty Pleas Among Serious Adolescent Offenders

Lindsay C. Malloy, Elizabeth P. Shulman, and Elizabeth Cauffman

Online First Publication, October 14, 2013. doi: 10.1037/lhb0000065

CITATION

Malloy, L. C., Shulman, E. P., & Cauffman, E. (2013, October 14). Interrogations, Confessions, and Guilty Pleas Among Serious Adolescent Offenders. *Law and Human Behavior*. Advance online publication. doi: 10.1037/lhb0000065

Interrogations, Confessions, and Guilty Pleas Among Serious Adolescent Offenders

Lindsay C. Malloy
Florida International University

Elizabeth P. Shulman
University of Pennsylvania and Temple University

Elizabeth Cauffman
University of California, Irvine

In the present study, we examined (a) the prevalence and characteristics of youths' true and false admissions (confessions and guilty pleas), (b) youths' interrogation experiences with police and lawyers, and (c) whether youths' interrogation experiences serve as situational risk factors for true and false admissions. We interviewed 193 14- to 17-year-old males ($M = 16.4$) incarcerated for serious crimes. Over 1/3 of the sample (35.2%) claimed to have made a false admission to legal authorities (17.1% false confession; 18.1% false guilty plea), and 2/3 claimed to have made a true admission (28.5% true confession; 37.3% true guilty plea). The majority of youth said that they had experienced high-pressure interrogations (e.g., threats), especially with police officers. Youth who mentioned experiencing "police refusals" (e.g., of a break to rest) were more likely to report having made both true and false confessions to police, whereas only false confessions were associated with claims of long interrogations (>2 hr) and being questioned in the presence of a friend. The number of self-reported high-pressure lawyer tactics was associated with false, but not true, guilty pleas. Results suggest the importance of conducting specialized trainings for those who interrogate youth, recording interrogations, placing limits on lengthy and manipulative techniques, and exploring alternative procedures for questioning juvenile suspects.

Keywords: confessions, guilty pleas, interrogations, juvenile justice, juvenile offenders

At the age of 13 years, Tyler Edmonds of Oktibbeha County, Mississippi, made a shocking confession to police—he had shot and killed his sister's husband. Later, Tyler claimed to have falsely confessed to protect his 26-year-old sister. Tyler was tried as an adult and sentenced to life in prison. Four years later, the Mississippi Supreme Court overturned his conviction (Edmonds v. State of Mississippi, 2007), and Tyler was acquitted in a subsequent

retrial. This high-profile example of an innocent juvenile defendant confessing to a crime is not an isolated incident. It is impossible to pinpoint precisely how often false confessions occur; however, proven cases from juveniles and adults have been documented around the world (Kassin et al., 2010). In addition, there are many known cases of juvenile and adult defendants opting to plead guilty to crimes they have not committed (see Redlich, 2010a, for a review), typically to avoid facing a harsher penalty if convicted at trial. In approximately 25% of the Innocence Project's (n.d.) DNA exonerations in the United States ($n = 305$), a false admission of guilt contributed to the wrongful conviction.

Admissions of guilt are powerful. People are so predisposed to believe confessions that their existence tends to interfere with potential jurors' and investigators' evaluation of other relevant evidence (e.g., eyewitness identifications, forensic science; Hasel & Kassin, 2009; Kassin, Bogart, & Kerner, 2012). When individuals decide to plead guilty, they forego the right to a jury trial and several other legal protections (e.g., the right to confront and cross-examine witnesses; Redlich, 2010a). Thus, the question of whether admissions of guilt (confessions and guilty pleas) are diagnostic of actual guilt is critical.

Over the last two decades, research on false confessions has mushroomed (see Kassin et al., 2010; Lassiter & Meissner, 2010; Leo, 2008, for reviews). As police interrogations have moved toward psychological manipulation rather than exertion of brute force (Thomas & Leo, 2012), researchers have tried to elucidate the aspects of interrogations (i.e., situational risk factors) that may induce false confessions. Despite a growing interest in the topic,

Lindsay C. Malloy, Department of Psychology, Florida International University; Elizabeth P. Shulman, Department of Psychology, University of Pennsylvania and Department of Psychology, Temple University; Elizabeth Cauffman, Department of Psychology and Social Behavior, University of California, Irvine.

This project was supported by a grant to Elizabeth Cauffman from the National Institute of Mental Health (K01MH01791-01A1). We thank Professor Richard Leo for his helpful comments on an early version of our study measures. We also thank the California Division of Juvenile Justice (Bernard Warner, Rudy Haapanen, James Fairgrieve, and Carla Viazcan) and all of the staff at the detention facility. This project would not have been possible without the numerous graduate and undergraduate students who worked tirelessly to collect the data. We would like to acknowledge their exceptional efforts. Portions of this research were presented at the annual meetings of the American Psychology-Law Society (2008 and 2013) and the International Investigative Interviewing Research Group (2012).

Correspondence concerning this article should be addressed to Lindsay C. Malloy, Department of Psychology, Florida International University, 11200 S. W. 8th Street, Miami, FL 33199. E-mail: lmalloy@fiu.edu

especially concerning adolescents and other vulnerable populations (e.g., persons with mental illness; Redlich, 2004), very little is known about the prevalence or characteristics of false confessions among juveniles or the interrogation techniques to which young suspects are subjected. Furthermore, although most criminal convictions (over 90%) are determined via guilty plea rather than trial (Cohen & Reaves, 2006), research on false guilty pleas has lagged behind research on false confessions (Redlich, 2010a). Moreover, virtually nothing is known about juveniles' decisions to admit guilt truthfully. To increase the potential for distinguishing true from false admissions, it is imperative to examine true admissions as well.

The Importance of Examining Interrogations, Confessions, and Guilty Pleas Among Youth

Adolescents, due to their relative immaturity, may be more prone than adults to make both true and false admissions of guilt. Indeed, proven exoneration cases (Drizin & Leo, 2004; Gross, Jacoby, Matheson, Montgomery, & Patil, 2005), self-report studies (Gudjonsson, Sigurdsson, Sigfusdottir, & Young, 2012), laboratory paradigms (Redlich & Goodman, 2003), and hypothetical vignettes (Goldstein, Condie, Kalbeitzer, Osman, & Geier, 2003) demonstrate that youth are particularly vulnerable to providing false confessions compared with adults. Of youth who have been interrogated by the police, the self-reported rates of false confession vary from 0% to 13.8% (e.g., Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, 2006; Sigurdsson & Gudjonsson, 1996). The desire to protect a peer and attempts to avoid punishment or custodial pressure are common motivations for false confession (see Gudjonsson, 2010). All but one (Viljoen, Klaver, & Roesch, 2005) of these self-report studies were conducted in Europe, however. Given the distinctiveness of U.S. interrogation practices (see Gudjonsson & Pearce, 2011), these prior findings may not generalize to U.S. populations.

Developmental characteristics such as impulsivity, susceptibility to social influence, lower status relative to adults, and immature judgment may explain the greater propensity of adolescents to admit to offenses of which they are accused, especially if psychologically manipulative and high-pressure techniques are used (Cauffman & Steinberg, 2000; see Owen-Kostelnik, Reppucci, & Meyer, 2006, for a review). Compared with adults, adolescents are more sensitive to immediate rewards and less sensitive to long-term negative consequences (Cauffman et al., 2010; Steinberg et al., 2009). In the context of an interrogation, this may mean that adolescents are excessively swayed by implications of lenient treatment for confessing and insufficiently attentive to the long range implications of confessing (e.g., a greater certainty of conviction). Furthermore, adolescents tend to be highly susceptible to peer influence, placing great importance on peer relationships (e.g., Gardner & Steinberg, 2005). The desire to protect a peer may therefore be especially powerful for adolescents (e.g., Warr, 1993). In addition, adolescents tend to be more compliant with authority figures than adults (e.g., Grisso et al., 2003), as acknowledged in a Supreme Court decision, which noted that “[a] reasonable child subjected to police questioning will sometimes feel pressured to submit when a reasonable adult would feel free to go” (*J.D.B. v. North Carolina*, 2011, p. 8). Furthermore, juveniles exhibit less legal competence than adults: They often fail to fully understand

their legal rights, frequently waive their Miranda rights, and rarely request an attorney (e.g., Feld, 2013; Grisso et al., 2003; Viljoen et al., 2005). Consequently, juveniles' legal decisions, including those related to admissions of guilt, may reflect poor legal abilities/understanding, inappropriate reasoning (e.g., failure to consider the strength of the evidence against them), and/or developmental immaturity.

The contexts in which youth decide to plead guilty may share many similarities with police interrogation contexts, including demands to make an immediate decision (e.g., one-time offer plea deals) and pressure from adult authority figures (e.g., lawyers; Drizin & Luloff, 2007; Redlich, 2010a). Thus, the same developmental characteristics that put youth at heightened risk for false confession may also influence their tendency to make a false guilty plea. However, the alternative is also possible: Juveniles may be unlikely to falsely plead guilty because their risk proneness drives them to take their chances at trial (Redlich, 2010b).

False Admissions of Guilt

The role of developmental immaturity in admission of guilt may be amplified in the United States, due to the use of high-pressure interrogation techniques (Kassin et al., 2010; Owen-Kostelnik et al., 2006) and the threat of increasingly punitive sentences for juveniles (Fagan, 2008). Generally, American interrogations are guilt presumptive, accusatorial, and confrontational, with officers frequently employing the Reid technique (Inbau, Reid, Buckley, & Jayne, 2013; Leo, 2008). Various techniques are used to induce confession, including maximization strategies that involve intimidation tactics, such as accusing the suspect and presenting actual or fabricated evidence of guilt. Interrogators may also use minimization strategies in which police feign empathy with suspects and provide face-saving justifications for committing crime (e.g., armed robbery to provide food for loved ones). Both maximization and minimization are designed to make suspects feel that their best option is to confess (Ofshe & Leo, 1997).

U.S. police are generally allowed and trained to question juveniles in the same manner as adults (Inbau et al., 2013). The limited research evidence available suggests that they do: In a national survey (Reppucci, Meyer, & Kostelnik, 2010), substantial proportions of police officers who had interrogated in the last year reported using maximization techniques, such as the presentation of false evidence (23%), deceit (32%), and repeated questioning (58%), among other Reid-like techniques. Feld (2006) examined 66 recorded interrogations with 16- to 17-year-old suspects and found many similarities with Leo's (1996) observational study of interrogations with adult suspects (e.g., 34% maximized the seriousness of the crime, 38% offered to help). Analyzing felony interrogations with juveniles in Minnesota, Feld (2013) found that police commonly used maximization tactics (69.1%), including confronting juveniles with evidence (54%), emphasizing the seriousness of the crime (14%), and accusing them of lying (33%). Furthermore, not only is it legal for youths to be questioned in the same manner as adults—some of the Reid technique's interrogation themes are specifically designed to exploit youths' developmental vulnerabilities. For example, police may suggest to a juvenile suspect that his or her lack of parental supervision or temptation to abuse substances justifies the commission of the crime (Inbau et al., 2013). However, surveys of law enforcement

and recorded interrogations may underestimate the full extent of high-pressure interrogation of young suspects: Police may underreport their use of particularly coercive strategies and/or use less extreme forms of them while under observation than in private.

Notably, we also have limited knowledge concerning how youths' interrogation experiences influence their confession and plea decisions. In laboratory studies and actual cases, evidence strongly suggests that certain techniques (e.g., lengthy interrogations, deceit/trickery) increase the incidence of false confession (e.g., Drizin & Leo, 2004; Redlich & Goodman, 2003; Russano, Meissner, Narchet, & Kassin, 2005). However, extant research is limited, in that it draws largely on cases of proven false confessions (e.g., DNA exonerees), which may not be representative of all criminal/delinquency cases (Redlich, Kulish, & Steadman, 2011).

Less is known about false guilty pleas and their situational risk factors. Redlich (2010a) cogently describes the similarities and differences between false confessions and false guilty pleas. For example, to induce confession, police may use minimization to *imply* leniency, but are prohibited from *promising* it. In contrast, when reaching a plea agreement, explicit promises of leniency are allowed; plea agreements typically involve a decision to accept a lesser sentence than what is at stake if convicted at trial. (In laboratory studies, both implications and promises of leniency increase the rate of false confession [Kassin & McNall, 1991; Russano et al., 2005]). Redlich, Summers, and Hoover (2010) investigated false guilty pleas and false confessions among adult offenders with mental illness: The overall rate of false guilty plea (36.5%) was higher than the rate of false confession (22%). Both types of guilt admission were commonly made to end questioning, avoid jail, or go home, suggesting that similar psychological processes may operate in the decision to submit false confessions and false guilty pleas. Whether the same pattern holds for juveniles—another group overrepresented among proven false confession cases—remains unknown.

True Admissions of Guilt

Although several studies have focused on false confessions, research on true confessions is scant. The findings from the few extant studies suggest high rates of true confession among youth. For example, in a study of 16- to 24-year-olds in *further education* in Iceland (i.e., progression beyond compulsory education, which ends at age 15), Gudjonsson et al. (2006) found that 53% of youth who had been interrogated had confessed to the police truthfully versus 7% who had confessed falsely. However, to the extent that interrogation techniques and sentencing practices play a role in confession decisions, rates of true and false confession may vary significantly across countries. Redlich et al. (2011) compared true and false confessions in a U.S. sample of adult offenders with serious mental illness and found that whereas false confessions may occur more often to protect someone else and for short-term gain, true confessions appear to be driven by feelings of guilt and belief that the police possess inculpatory proof (e.g., Gudjonsson, 2003; Redlich et al., 2011). Although the motivations to truly and falsely confess may differ, both types of confessions may be elicited by police pressure (Ofshe & Leo, 1997). Considering the persuasive nature of confession evidence and the finding that individuals, including those working in the legal system, cannot

distinguish between true and false confessions from adult or juvenile offenders (Honts, Kassin, & Craig, 2013; Honts, Kassin, & Forrest, 2009; Kassin, Meissner, & Norwick, 2005), it is important to develop practices that discourage false confessions, while preserving the potential to procure true confessions. Research examining the psychological processes and external conditions that yield true versus false admissions in various populations moves the field closer to this goal.

The Present Study

In the present study, we examined true and false admissions of guilt among serious male adolescent offenders. This population is of particular concern because young men are the demographic most likely to be arrested (U.S. Department of Justice, Federal Bureau of Investigation, 2011), and youth is a risk factor for false confession (Kassin et al., 2010; Redlich, 2007). We focused specifically on admissions of guilt with potential legal consequences—those made to police officers and judges. Our research design and sample extend prior work on adolescents' true and false admissions of guilt in several key ways. First, we examined true and false variants of both *confessions* (i.e., to police) and *guilty pleas* (i.e., to judges), which we refer to collectively as true and false *admissions*. Second, we explored interrogation experiences and their relation to admissions.

Our analyses describe the self-reported prevalence and characteristics of true and false admissions as well as the motivations behind them and the situational factors (e.g., police and lawyer behavior) associated with them. Based on prior findings (e.g., Gudjonsson et al., 2006; Redlich et al., 2011), we hypothesized that the rates of true admission would be higher than the rates of false admission, and that relatively high-pressure police interrogation experiences would be associated with both true and false confession, but especially with the latter. We expected to find the same pattern with respect to high-pressure experiences with lawyers and true and false guilty pleas. We also hypothesized that, because they are particularly peer oriented and vulnerable to peer influence (e.g., Gardner & Steinberg, 2005), adolescents would frequently cite protection of others as a motivation for false admission (e.g., Viljoen et al., 2005). Finally, we had two predictions that we were not able to test directly in the present study but for which our data are relevant. First, we expected that, because of vulnerabilities associated with adolescence (Steinberg, 2009), self-reported rates of false confession would be higher than in studies of adults. Second, because law enforcement officers in the United States tend to employ high-pressure tactics and are allowed to treat adolescents as functional equivalents to adults (Feld, 2006; Kassin et al., 2010), we hypothesized that American juvenile suspects would have higher rates of false confession than youth in other countries.

Method

Sample Characteristics

The sample for this study was drawn from a larger study of adolescents' adjustment to incarceration. The full sample consisted of 373 14- to 17-year-old male youth incarcerated in a secure juvenile justice facility in California. This facility was part of the

Division of Juvenile Justice (formerly, California Youth Authority), which was designed to house California's juvenile and young adult offenders "who have the most serious criminal backgrounds and most intense treatment needs" (California Department of Corrections & Rehabilitation, 9/15/13). The section of the interview that addressed youths' experiences with interrogations, confessions, and pleas was introduced midstudy. The analytic sample includes the subset of youth (52%; $n = 193$) who were surveyed on these items. Preliminary analyses revealed no statistically significant differences between the full sample and the 193 youth who completed the measures specific to the present study in terms of age, ethnicity, parental education, official committing offense, number of official prior charges, number of self-reported arrests, or age at first arrest. As such, we only describe the analytic sample.

Age at the time of incarceration ranged from 14 to 17 years ($M = 16.36$, $SD = .87$). Youth self-identified as Caucasian (5.7%, $n = 11$), African American (28%, $n = 54$), Hispanic (55.4%, $n = 107$), or other (9.8%, $n = 19$). Ethnicity data were missing for two participants (1%). Parental education was used as a proxy for socioeconomic status: 7% of parents had less than a high school education, 18% of parents had some high school, 43% of parents had a high school diploma or GED, and 32% of parents had some college. Parental education data were missing for 27% of the sample ($n = 52$). According to official records, youth had an average of 3.1 prior charges ($SD = 2.8$, range = 1 to 14), though 20.1% of youth had no prior charges. Participants' most serious official committing offense was categorized as a person (i.e., violent; 72.9%; $n = 140$), property (10.4%; $n = 20$), public order/weapon (8.3%; $n = 16$), drug (4.2%; $n = 8$), or other (4.2%; $n = 8$) offense. Excluding two outliers more than three standard deviations from the mean, youth reported having been arrested, on average, 5.61 times ($SD = 5.90$), and the average age at first arrest was 13.04 years ($SD = 1.77$).

Materials and Coding

The measures used were developed specifically for the present study and were administered at the end of 2 weeks of incarceration at the facility. Youth were told, "Now I am going to ask you some questions about confessing, or admitting, to committing a crime." All questions were read aloud by interviewers.

False and true admissions. To gauge rates of false admissions of guilt, youth were asked, "Have you *ever* confessed to a crime that you did *not* commit—said you did a crime that you did *not* actually do?" Those who responded affirmatively were asked how many times they had done so and their age at first false admission. If youth reported multiple false admissions of guilt, then they were asked to think about the *last* time they had done so while answering a series of follow-up questions, including (a) "How old were you the last time that you confessed to a crime that you did *not* commit?"; (b) "Who did you confess to (i.e., police, judge, lawyer, parent, friend)"; (c) "What crime(s) did you confess to even though you did not actually *do* the crime(s)"; (d) "Why did you confess to a crime that you did *not* commit?"; (e) "Did you confess to a crime that you did *not* commit when you were under the influence of drugs or alcohol?"; and (f) "Did you ever take back the confession?" If youth did not appear to understand the final question regarding retractions, interviewers followed up with, "Did you ever say that you really did *not* do the

crime(s) and only *said* that you had?" Interviewers were trained to emphasize the italicized words. Because we were interested in admissions that have potential legal consequences, we focused our analyses on admissions of guilt to police officers (confessions) and admissions of guilt to judges (guilty pleas).

The measure of true admissions of guilt was identical to the false admissions measure, except that it began with the question, "Have you ever confessed to a crime that you *did* commit?" and the follow-up questions similarly asked about crimes that youth did commit.

Open-ended responses for the crime(s) admitted to and the reasons for admission (true or false) were coded as follows: Crime type was coded as person, property, public order/weapon, drug, or other. Reasons for admission were coded separately for confessions and guilty pleas as (a) protect someone else, (b) under duress, (c) instrumental, (d) perception of proof, (e) getting it over with, (f) guilt/honesty, and/or (g) don't know. Table 1 provides definitions and examples. Two coders coded all responses, and reliability was acceptable for all categories (Kappas $\geq .86$). When discrepancies were encountered, they were resolved by discussion.

Interrogation experiences. This questionnaire was designed to assess juveniles' interrogation experiences. Participants were instructed to think about *all* of the times that they had been interrogated. That is, they were told,

Now I'm going to ask you about a few techniques that are sometimes used when a suspect is questioned about a crime to try to get the suspect to confess to committing the crime. I want you to tell me if the *police*, a *lawyer*, a *parent*, or a *friend* have *ever* done any of these things when questioning *you* as a suspect.

Number and type of techniques. Thirty-four yes–no questions assessed whether adolescents had been exposed to a variety of interrogation tactics in the following broad technique categories: befriending, deception, verbal insults, threats, refusals, and use of force (see Table 2). For each question, youth were asked, "Did anyone [x]?" and then they indicated whether it had occurred with police, lawyers, parents, or friends. In the present study, we focus on experiences with police and lawyers only. The final item in each category (except befriending) invited youth to provide an "other" response (e.g., "Did anyone threaten you in any other way?"). Items were collapsed to provide a dichotomous score (experienced = 1, did not experience = 0) for each of these broad categories of techniques for police and lawyers. In addition, participants were asked if they had ever felt "pressured or forced" to confess, and whether they had ever been questioned while under the influence of drugs or alcohol. These represent additional dichotomous outcome variables for police and lawyers separately.

Responses to the 34 yes–no questions (yes = 1, no = 0) about interrogation experiences were summed to create total scores for police officers and lawyers (alphas = .87, .76, respectively); higher scores indicate that a youth had experienced more tactics intended to induce confession. Responses to the "other" questions that were consistent with an existing question were not counted in the sum scores.

Length and frequency of interrogations. Participants were asked to estimate the longest amount of time (in hours) that they had been questioned as a suspect by the police and by lawyers. Because research indicates that most interrogations finish within 2 hr (Baldwin, 1993; Leo, 1996), we calculated a dichotomous

Table 1
Coding Motivations for True and False Admissions: Categories, Definitions, and Examples From Participant Interviews

Category	Definition	Examples
Protect someone else	Referenced desire to protect another individual	“Didn’t want brother to get in trouble.” “Friend did it but I took the blame to protect my friend.” “He was the older homey and you have to.”
Under duress	Referenced pressure or lack of understanding due to immaturity or intoxication	“Cops were pushing. . .got tired of it.” “Because cop said that I “could go home if I confessed.”” “Pressured.” “Young. . .didn’t know what they were telling me.” “Because the lawyer and parent is always right.”
Instrumental	Referenced an intentional strategy, usually to lessen punishment or to avoid a more severe consequence	“To get less time.” “They were going to try and give me more time.” “To get a lesser sentence.”
Perception of proof	Referenced the strength of the evidence against him or the likelihood of a positive trial outcome	“They had evidence and a witness and a camera.” “The gun for the robbery was in the car.” “Couldn’t prove I didn’t do it.” “Thought I would lose at trial.”
Getting it over with	Referenced the desire to expedite the legal process	“They already knew it was me – why lie?” “So I can get on with my time – hurry up and get sentenced.” “To get the process over with.” “To get done with court.”
Guilt/honesty	Referenced actual guilt or the desire to be honest or forthcoming	“Because I did it.” “It was the right thing to do.” “To be honest.”

interrogation length variable (1 = more than 2 hr, 0 = less than 2 hr). Youth were also asked to estimate the greatest number of times that they had been questioned by the police and by lawyers about a particular crime.

Presence of others during interrogations. Participants were asked whether they had ever been questioned as a suspect by police with another police officer, lawyer, parent, or friend present, or whether they had ever requested the presence of these individuals.

Procedure

Research approval was granted by the university Institutional Review Board, Office of Juvenile Justice and Delinquency Prevention, and the facility in which the youth were incarcerated and interviews were conducted. Youth between 14 and 17 years of age who were newly admitted to the facility were recruited within 48 hr of arrival for a larger study assessing juveniles’ adjustment to incarceration. Both informed consent from a parent/guardian (97% of parents contacted) and youth assent (96%) were required for

participation. A parent/guardian provided informed consent via a tape-recorded telephone conversation, and then the study was described to youth in detail to obtain assent.

During the assent process, confidentiality was discussed thoroughly, and youth were ensured that confidentiality could only be broken under exceptional circumstances: if the youth reported that he had plans to hurt himself or somebody else, or reported that someone was hurting him. Youth were informed that the researchers had obtained a Confidentiality Certificate from the Department of Health and Human Services of the U.S. government, which meant that the data could not be subpoenaed (e.g., to prosecute a crime) and that the researchers could not reveal any information that might identify the participant in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. Participants were told that they would not be treated any differently at the facility or in any future court hearings or parole for participating in the study. Youth were reminded of these conditions before the start of each interview.

Table 2
Questions Assessing the Number and Type of Interrogation Techniques

Category of technique	Questions
Befriending	Did anyone say that they were there to help you? Act like your friend?
Deception	Did anyone lie to you? Say that they had evidence that they did not really have? Fingerprints? DNA? Video surveillance? A confession from someone else? A witness?
Verbal insults	Did anyone swear or curse at you? Insult you with words? Yell at you? Say something rude about your race/skin color? Culture or religion?
Threats	Did anyone say that you could be tried as an adult? Could get in more trouble or things could get worse for you? Could go to jail? Could be raped or killed in jail?
Refusals	Did anyone refuse to give you a break to rest? A bathroom break? Water? Snack? Time to sleep?
Use of force	Did anyone hit you? Kick you? Push or shove you? Throw things at you?

Measures specific to the present study were administered at the third interview, which occurred approximately two weeks after admission to the facility and was referred to as the “Week 2” interview. Participants were interviewed individually in private rooms, out of earshot of facility guards and other youth. Interviewers read aloud all materials to ensure comprehension. The Week 2 interview (and those at all other time points) largely consisted of measures unrelated to the present study that were designed to assess youths’ mental health and emotions, substance use, victimization and offending experiences, perceptions of the facility, and services received at the facility (e.g., treatment, education). The full Week 2 interview took approximately one hour to administer, and the measures specific to the present study lasted approximately 10 to 15 min. After the baseline interview was conducted, highly trained research assistants tracked participants throughout the study and conducted the remaining interviews pending their availability. The Week 2 interviews were conducted by 29 interviewers; 6% were conducted by males ($n = 3$). To ensure that the youths did not confuse our research team with correctional staff, our interviewers did not wear facility uniforms and clearly identified themselves as members of a university research team. At each interview, youth received a snack for their participation. Official case file records were provided by the facility.

Results

Preliminary Analyses

Preliminary analyses indicated that there were no statistically significant age differences in the self-reported rates of true or false admissions or in any of the interrogation experience variables. Consequently, age was not considered in subsequent analyses.

Prevalence and Characteristics of False and True Admissions

Prevalence of false and true admission is reported in Table 3. Over one third of the sample (35.2%) reported having made a false admission of guilt: 17.1% ($n = 33$) had falsely confessed to police; an additional 18.1% ($n = 35$) of youth claimed to have submitted a false guilty plea to a judge (but had not confessed falsely to police). Of the 33 self-reported false confessors, 42% ($n = 14$) also

reported having made a false guilty plea to a judge. Of those who reported either type of false admission, 46.3% reported doing so more than once ($M = 1.73$, $SD = 1.04$). The average age of first false admission was 14.2 ($SD = 1.89$).

Overall, 65.8% of the sample reported a true admission of guilt. Over one quarter (28.5%; $n = 55$) of youth claimed to have truthfully confessed to the police, and an additional 37.3% ($n = 72$) claimed to have truthfully confessed to judges only (i.e., not to police) and were thus coded as having made a true guilty plea. Of the 55 self-reported true confessors, 63.6% ($n = 35$) also reported having made a true guilty plea to a judge. Of those who reported a true admission, 68.5% reported doing so more than once ($M = 3.68$, $SD = 3.36$). The average age of first true admission was 13.9 ($SD = 1.88$).

Person (i.e., violent) offenses were quite common for all admission types (55% true confessions, 39% false confessions, 37% true guilty pleas, 68% false guilty pleas). Property offenses were also relatively common (18% true confessions, 37% false confessions, 23% true guilty pleas, 17% false guilty pleas). The remaining offenses were classified as “other.” Over one third (34.5%) of those who claimed to have falsely confessed, and 5.7% of those who claimed to have made a false guilty plea, reported that they were under the influence of drugs or alcohol at the time of false admission. Nearly one quarter (24.1%) of those who reported a true confession, and one fifth (19.4%) of those who reported a true guilty plea, said that they were under the influence of drugs or alcohol at the time of true admission.

Motivations for False and True Admissions

Consistent with our predictions, the majority of false confessions (51.5%) were made to protect someone else. In contrast, the most common reasons (51.4%) reported for submitting false guilty pleas were instrumental (e.g., to get a reduced sentence). Figure 1 provides a summary of motivations for true and false admissions. Reasons such as “getting it over with,” “guilt/honesty,” and “don’t know” were only ever proffered for true admissions, and only one youth mentioned “perception of proof” regarding a false admission. No participant provided a response that fit multiple categories for false admissions. Although not explicitly asked, most youth (64%; $n = 18$) who claimed to have made false admissions to protect someone else mentioned whom they were protecting: for two thirds, it was a friend ($n = 12$), and for one third ($n = 6$), it was a family member. One youth mentioned both. These spontaneous responses also yielded evidence that youth made false admissions to protect individuals who would face more serious consequences for the crime. Almost one third (32.1%) of youths’ responses concerning protecting someone else described the person they were protecting as “older” or referred to their criminal history (e.g., “Confessed for an older friend who would have served life”; “Cuz it was one of my older brothers; it was gonna be his second strike so I just said I did it”).

In contrast to false admissions, self-reported true admissions were rarely made to protect someone else and were less commonly made under duress. The most frequently provided motivation for true confessions was “guilt/honesty” and for true guilty pleas, “instrumental.” Sixteen youth (12.6%) reported more than one motivation underlying true admissions (see Figure 1).

Table 3
Self-Reported True and False Admissions (Confessions and Guilty Pleas) to Police and Judges

	True only <i>n</i> (%)	False only <i>n</i> (%)	True and false <i>n</i> (%)
Police (confession)	42 (21.8)	20 (10.4)	13 (6.7)
Judge (guilty plea)	52 (26.9)	15 (7.8)	20 (10.4)
Summary			
Any false confession	33 (17.1)		
Any false guilty plea	49 (25.4)		
Any true confession	55 (28.5)		
Any true guilty plea	107 (55.4)		
No false admissions	125 (64.8)		
No true admissions	66 (34.2)		
No admissions (true or false)	44 (22.8)		

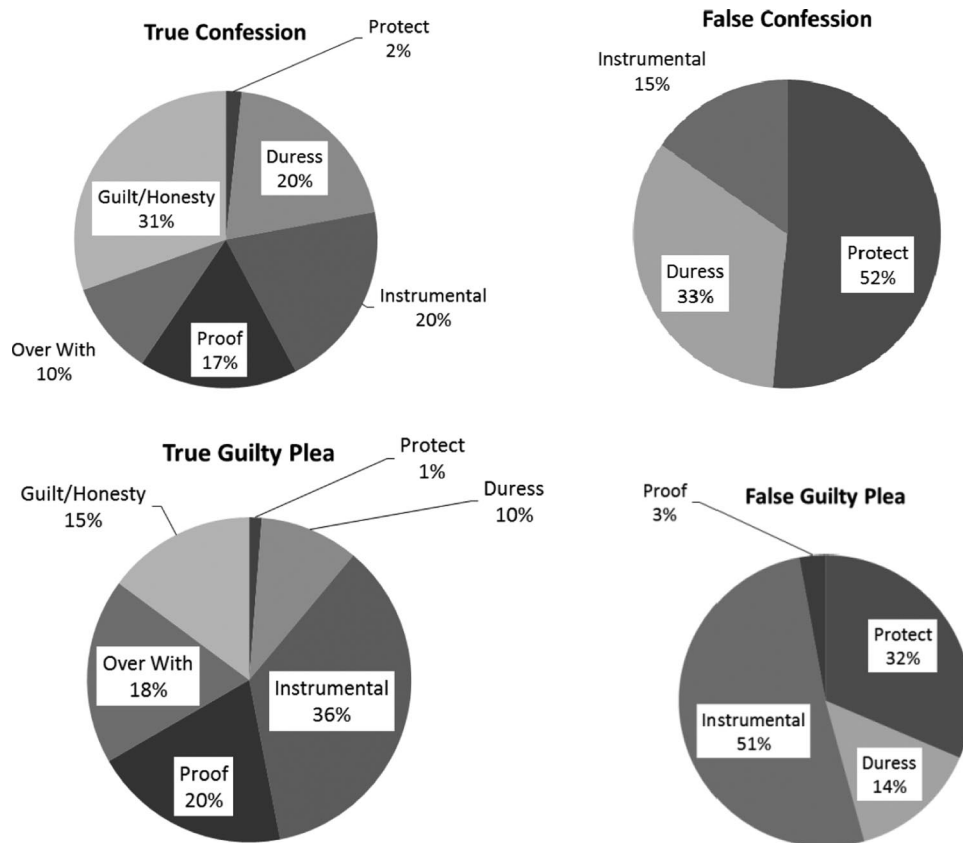


Figure 1. Percentage of youth reporting various reasons for true and false admissions.

Retraction of False and True Admissions

Retraction rates were similar for false confessions and false guilty pleas ($z = 0.69, p = ns$): Youth reported attempts to retract one third (33.3%) of false confessions and one quarter of false guilty pleas (25.7%). Retraction rates did, however, differ significantly depending on the motivation for false admission, $\chi^2(3) = 13.58, p = .004, \Phi = .45$. For example, only 10.7% who made false admissions to protect someone else retracted them compared with 30.4% who made false admissions for instrumental purposes. Nearly two thirds (62.5%) of false admissions made under duress were retracted.

Smaller percentages (13.5%) of self-reported true confessions and guilty pleas (2.9%) were retracted. Direct comparisons revealed that the proportions of retractions were smaller for true compared with false confessions ($z = -2.19, p < .05$), pleas ($z = -3.61, p < .001$), and admissions ($z = -4.05, p < .001$). Thus, those who falsely claimed to have committed a crime were significantly more likely to attempt to retract that statement than those who truthfully admitted to committing a crime.

Juveniles' Interrogation Experiences

Number and type of techniques. On average, youth claimed to have experienced 10 interrogation tactics at the hands of police officers ($M = 9.97, SD = 6.17$; range = 0 to 25) and fewer than four from lawyers ($M = 3.36, SD = 2.89$; range = 0 to 14).

Regarding the technique categories (see Figure 2), the most common claims included police insulting (59.1%), befriending (71.5%), threatening (80.8%), and deceiving (81.3%) them. Claims of use of force (21.2%) and refusals (38.7%) were comparatively less common. Almost one third (29.6%) of participants reported having felt “pressured or forced” to confess by police officers. Furthermore, 38.7% of youth reported being under the influence of drugs or alcohol when interrogated by the police.

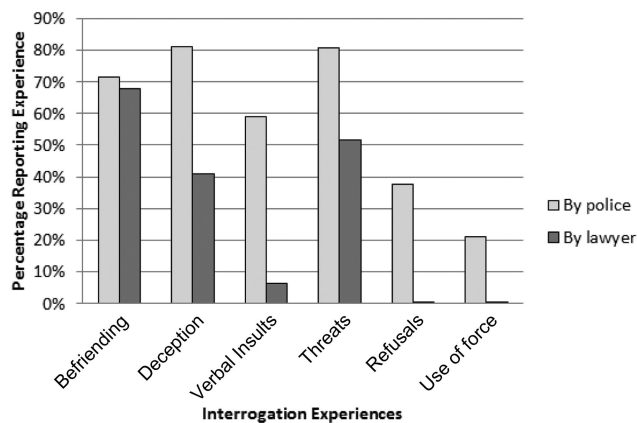


Figure 2. Percentage of youth who reported experiencing various categories of interrogation techniques.

Although youth reported fewer high-pressure tactics from lawyers (see Figure 2), it was relatively common for youth to report that lawyers relied on deceiving, threatening, and befriending (41%, 52%, and 69%, respectively). Only a few youth reported feeling “pressured or forced” to admit guilt by lawyers (10.8%) or being under the influence of drugs or alcohol when questioned by lawyers (1.1%).

Length and frequency of interrogations. According to self-report, youths’ longest police interrogations ranged from 1 min to 48 hr ($M = 3.37$ hr, $SD = 4.84$ hr, $Mdn = 2$ hr); most youth (65.1%) reported experiencing a police interrogation lasting 2 hr or more. Youth claimed that lawyer interrogations ranged from 0 min to 30 hr ($M = 52.85$ min, $SD = 2.32$ hr, $Mdn = 30$ min). The greatest number of times youth reported being questioned about a single crime varied widely from 0 ($n = 1$) to 30 times ($M = 3.72$, $SD = 4.17$, $Mdn = 2$) for police, and from 0 to 40 times ($M = 3.24$, $SD = 4.15$, $Mdn = 2$) for lawyers.

Presence of others during interrogation. It was common for youth to report having experienced interrogations with multiple police officers present (66.4%), but rarely did they report having had lawyers (7%), parents (6.7%), or friends (6.4%) present. When questioned by the police, only 20.5% of youth said that they had ever asked for a lawyer to be present, and only 15.1% and 3.3% said that they had ever asked for a parent or friend to be present, respectively.

The Relation Between Interrogation Experiences and False and True Admissions

Several analyses were conducted to determine whether the use of high-pressure police interrogation tactics was associated with higher rates of true and false admission. To assess this, we conducted logistic regressions of our dichotomous dependent vari-

ables—false confession, true confession, false guilty plea, true guilty plea—on three different sets of interrogation variables: (a) the total number and types of techniques, (b) the length and frequency of interrogations, and (c) the presence of others during interrogations. Because youth were instructed to think about *all* times that they had been questioned as a suspect when describing their interrogation experiences, and because multiple interrogations increase the risk of false confession (e.g., Gudjonsson et al., 2009; Redlich et al., 2010), we controlled for the number of self-reported arrests for all remaining analyses. We excluded two outliers whose mean number of self-reported arrests was more than three standard deviations above the mean. However, the same pattern of results emerged regardless of whether we included these youth. Results are presented in Table 4.

Is police interrogation behavior associated with false confessions? Contrary to our hypotheses, the total number of self-reported police interrogation tactics experienced (sum score) was not associated with self-reported false confessions to police. Examining the separate effects of each technique category, we found that youth who claimed to have experienced “police refusals” were more likely to say that they had falsely confessed compared with those who had not (odds ratio [OR] = 2.33, $p = .036$). One item within this refusal scale evidenced a particularly strong association with false confession: When youth reported police refusals of a break to rest, their odds of false confession were 4.2 times greater compared with youth who did report experiencing such a refusal, $p = .002$. Interrogations lasting over 2 hr (according to youth estimates) were also associated with greater odds of false confession (OR = 2.69, $p = .044$). However, the self-reported number of times youth were questioned by police

Table 4

Results of Logistic Regression Analyses Predicting Self-Reported False Confession, True Confession, False Guilty Plea, and True Guilty Plea

Predictor	False confession		True confession		False guilty plea		True guilty plea	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
# and type								
Sum police	1.05	[0.98, 1.11]	1.05	[1.0, 1.11]	NA		NA	
Sum lawyer	NA		NA		1.30*	[1.14, 1.49]	1.07	[0.96, 1.19]
Befriending	0.97	[0.31, 2.29]	1.72	[0.80, 3.70]	3.09*	[1.13, 8.46]	1.24	[0.65, 2.38]
Deceit	0.95	[0.35, 2.57]	1.34	[0.57, 3.19]	3.29*	[1.51, 7.16]	1.58	[0.86, 2.89]
Insults	1.17	[0.53, 2.58]	1.35	[0.70, 2.61]	0.97	[0.20, 4.72]	0.31	[0.07, 1.52]
Threats	1.77	[0.58, 5.47]	2.24	[0.87, 5.74]	3.70*	[1.57, 8.69]	1.73	[0.95, 3.17]
Refusals	2.33*	[1.06, 5.12]	1.92*	[1.01, 3.67]	TF		TF	
Use of force	1.13	[0.46, 2.80]	0.97	[0.44, 2.14]	TF		TF	
Felt pressured/forced	2.22	[0.99, 4.98]	2.16*	[1.09, 4.25]	1.72	[0.57, 5.16]	0.91	[0.34, 2.47]
Under the influence	1.83	[0.83, 4.05]	1.13	[0.58, 2.19]	TF		TF	
Length and frequency								
Length in hours	1.06	[0.99, 1.14]	0.96	[0.88, 1.05]	0.98	[0.82, 1.18]	0.83	[0.56, 1.21]
Interrogation > 2 hr	2.69**	[1.03, 7.02]	0.83	[0.43, 1.61]	0.75	[0.21, 2.72]	0.50	[0.17, 1.44]
Frequency	1.03	[0.94, 1.12]	1.00	[0.92, 1.08]	1.06	[0.98, 1.15]	1.07	[0.98, 1.16]
Presence of others								
Multiple police	1.10	[0.41, 2.95]	0.85	[0.39, 1.83]	NA		NA	
Lawyer	TF		0.49	[0.10, 2.33]	NA		NA	
Parent	TF		0.55	[0.12, 2.66]	NA		NA	
Friend	3.92*	[1.14, 13.42]	1.84	[0.56, 6.07]	NA		NA	

Note. NA indicates that no analysis was run because it did not make sense to do so (e.g., because police tactics were not examined in relation to guilty pleas); TF indicates that there were too few positive responses to conduct a reliable analysis. OR = odds ratio; CI = confidence interval.

* $p < .05$.

about a single crime was unrelated to false confessions. Of the juveniles who claimed to have falsely confessed to police, none said that they had been questioned with lawyers or parents present. For adolescents who said that they were questioned with a friend present, the odds of false confession were 3.92 times higher compared with those who said that they had not been questioned with a friend present; $p = .030$.

Is lawyer interrogation behavior associated with false guilty pleas? As hypothesized, the total number of high-pressure tactics youth claimed to have experienced with lawyers was related to false guilty pleas. The odds of youth reporting having made a false guilty plea increased by 30%, on average, for every additional tactic reportedly used by lawyers, $p < .001$. When juveniles said that their interrogation experiences included lawyers befriending, deceiving, or threatening them, their odds of reporting having made a false guilty plea were 3.09, 3.29, and 3.70 times greater ($ps \geq .003$), respectively, compared with youth who did not indicate having experienced these categories of techniques. The self-reported length and frequency of questioning by lawyers were unrelated to false guilty plea claims.

Is police interrogation behavior associated with true confessions? Two significant findings emerged. First, youth who claimed to have experienced police refusals had 92% greater odds of reporting a true confession, $p = .048$. Second, compared with youth who had never felt pressured or forced to confess, those who had had 2.16 times higher odds of having confessed truthfully ($p = .026$). True confessions were unrelated to the length, frequency, or presence of others during interrogations.

Is lawyer interrogation behavior associated with true guilty pleas? Although the total number of lawyer high-pressure tactics was related to *false* guilty pleas, no significant findings emerged for true guilty pleas.

Discussion

Developmental theory and empirical evidence suggest that juveniles may be particularly vulnerable to admitting guilt, both truthfully and falsely. Yet we know very little about confessions and guilty pleas among adolescents involved in the U.S. legal system, or about the interrogation techniques to which adolescents are exposed. The present study sheds light on the interrogation, confession, and guilty plea experiences of adolescents incarcerated in the United States.

Prevalence and Characteristics of False and True Admissions

Consistent with our hypotheses, the self-reported rates of true admission were higher than the self-reported rates of false admission. This finding is consistent with the few extant self-report studies on true and false confessions to police (Gudjonsson et al., 2006; Redlich et al., 2010). Perhaps the most prominent finding is the remarkably high rate of nonveridical admissions. This is problematic given evidence that neither students nor polygraph examiners can reliably distinguish juveniles' true from false confessions (Honts et al., 2009, 2013). In our sample of 14- to 17-year-old incarcerated males, over one third (35%) reported a false admission, and nearly half of these youth claimed to have done so more than once. Moreover, the majority of self-reported false admis-

sions were to serious crimes that carry severe penalties. As expected, the self-reported rate of false confession reported here (17%) was slightly higher than the highest rate (13.8%) found in studies of European students (Gudjonsson et al., 2009), and was considerably higher than the 0% rate among juveniles incarcerated in Iceland (Sigurdsson & Gudjonsson, 1996) and the 5.9% rate found in the only other self-report study conducted with detained juveniles in the United States (Viljoen et al., 2005).

Intense interrogation methods, as well as specific features of criminal law in the United States, may contribute to the high rate of false confession in this study relative to studies conducted in Europe. It could also be a consequence of the youth in our sample undergoing multiple interrogations; past studies have found that repeated interrogations are associated with higher rates of self-reported false confession (Gudjonsson et al., 2009). Although it is difficult to compare prevalence rates across studies, the extant literature suggests that a significant minority of youth questioned by police will provide a false confession.

False guilty plea claims were also alarmingly common (25% of youth). Because ours is the first study to report on the prevalence of self-reported false guilty pleas by juveniles, and only one study has examined such pleas among adults, it is difficult to place this finding in context. However, the rate we found is only a bit lower than that found in a survey of incarcerated adults (mean age = 36.5 years) with serious mental illness (Redlich et al., 2010). In the Redlich et al. study, as in ours, the rate of false guilty pleas (37%) was higher than the rate of self-reported false confessions (22%). This may be because it is legally permissible for authorities to use *explicit* promises of leniency when making plea agreements, or it may reflect the notion that pleading guilty is different from admitting guilt in the colloquial sense.

Motivations for False and True Admissions

Regarding motivations for admissions, it is noteworthy that true confessions were most commonly attributed to the desire to behave honestly. This suggests that it may be unnecessary to rely on manipulative and coercive techniques to procure true confessions from young suspects, many of whom are cooperative and provide confessions early on in interrogations (Feld, 2013). At the same time, it is possible that youth constructed this motivation for admitting guilt post hoc to portray themselves favorably.

A key finding was that most false confessions were reportedly made to protect someone else. This pattern comports with results from similar studies (see Gudjonsson, 2010; Viljoen et al., 2005). The impulse to confess in order to protect a loved one from more severe consequences harkens back to the Tyler Edmonds case. Edmonds claimed that coercion from his older sister—not the police—led to his confession. His sister was briefly allowed in the interrogation room, held his hand, and told him to “tell them the truth,” which Edmonds interpreted as a prompt to confess (falsely), based on their preinterrogation agreement to protect her from the death penalty (Edmonds & Clay v. Oktibbeha County, Mississippi, 2012). False confessions made to protect someone else are consistent with theories of adolescent development, which posit that adolescents are particularly sensitive to peer-related influence (Gardner & Steinberg, 2005). According to this perspective, adolescents, to a greater extent than adults, should be willing to take the blame for someone else if they believe it will confer greater

social status (or prevent them from losing status). Additionally, adolescents may simply care more than adults about protecting their friends from prosecution. In one national survey, 16- to 19-year-olds were twice as likely as younger (11 to 15 years) or older (20 to 21 years) respondents to say that they would lie to police to protect their friends (Warr, 1993).

In some cases in which juveniles lie to protect someone—especially someone older or more criminally experienced—the real perpetrators may be exploiting adolescents' naivety and/or greater tendency to conform. In addition, this phenomenon may reflect a behavioral code that is an unintended outgrowth of *three strikes* types of policies. Indeed, several youth spontaneously mentioned the three-strikes law in California, which requires mandatory sentences for three-time felony offenders (see Zimring, Hawkins, & Kamin, 2001, for a review). Thus, individuals facing a third strike may persuade or coerce youths with a lesser record to shoulder the blame.

A second major explanation given for false admissions, especially false guilty pleas, was that youth believed that doing so would lessen punishment (i.e., minimize costs); a pattern that is consistent with rational choice models of decision making (Scott, 2000). Again, our results echo those of Redlich et al. (2010), who found that almost two thirds of adults with mental illness who falsely pled guilty said that they did so to lessen their punishment. In the present study, rates of confessing to avoid a perceived greater cost were similar for self-reported true and false confessors. This suggests that youth may believe that confessing will lead to a better outcome, regardless of whether the confession is truthful. (The same was not true of guilty pleas; instrumental reasons appeared to be cited more commonly for false than true pleas.) True and false confessors were also similarly likely to cite being under duress. However, those who claimed to have made true confessions mentioned additional motivations, including perception of proof, getting it over with, and wanting to be honest.

Retraction of False and True Admissions

In several high-profile wrongful convictions of juveniles (e.g., Martin Tankleff, the Central Park Five, Tyler Edmonds), false confessions were later retracted. Although claims of retraction were not the norm in our study, youth said that they had retracted a sizable proportion of false admissions (33% of false confessions, 26% of false guilty pleas). Despite the relatively small numbers of youth involved in these comparisons, the retraction rates were significantly lower for true than for false claims (13.5% of true confessions, 2.9% of true guilty pleas). Thus, attempts to retract a confession or guilty plea may indicate that an admission is false. Furthermore, for reportedly false admissions, the pattern of retractions seems to roughly track the degree to which the admission was extracted involuntarily. False admissions provided to protect someone (which may be relatively voluntary) were rarely retracted, whereas those made for instrumental reasons (which could be viewed as less voluntary) were three times as likely to be retracted. Finally, false admissions extracted while the participant was under duress—the least voluntary of the categories—were retracted in the majority of cases. Though further research is needed, our findings suggest that a retraction attempt should at least give investigators and attorneys pause, especially if the admission was obtained after a high-pressure interrogation.

Interrogation Experiences and Their Relation With False and True Admissions

Our study provides novel insight into adolescents' views of the interrogation experience in the United States. In our sample, a majority of youth reported experiencing high-pressure techniques when questioned by police officers, including some that might render a confession inadmissible in court (e.g., use of force, explicit threats, refusals; White, 2001). Some described experiencing threats such as, "If I move, they will beat the shit out of me"; "Arrange for my enemy as my roommate"; "Shoot me in the face"; "Beat me up to get information"; "Taser me in front of my mom"; "Never see my family again, be someone's bitch, going to get raped"; and "I was going to be someone's cupcake." Nine youth reported being refused a lawyer, a phone call, or an opportunity to talk to a parent. One reported that the police officer placed his gun on the table during the interrogation, and another said he was spat on.

The use of harsh tactics may be facilitated by the absence of any adult representing the youth's interest. Adolescents in this sample rarely reported having had a parent or lawyer available to them during police questioning. However, even if parents were present, research indicates that parents may not have the requisite legal knowledge or sophistication to appropriately advise their children (Grisso & Ring, 1979; Woolard, Cleary, Harvell, & Chen, 2008). It is therefore particularly important that lawyers be present when young suspects are questioned. A lawyer's presence may be especially important if young suspects are intoxicated, as nearly 40% of youth in the present study reported being at the time of questioning.

That said, youths' claims about lawyers' behavior also raise some red flags. Though lawyers do not appear to use coercive tactics as frequently as police, they used some techniques (e.g., threats) that were associated with higher rates of self-reported false guilty pleas. This underscores the need for research on *all* phases of the legal processing of adolescent suspects. Though our study was unable to distinguish between adolescents' experiences with lawyers for the defense versus the prosecution, future studies should attempt to do so. This may be challenging to accomplish with retrospective self-report, however, given juveniles' limited understanding of the technical aspects of their legal experiences (e.g., Grisso et al., 2003).

A key question of the present study was whether interrogation experiences were related to true and false admissions. As expected, self-reported high-pressure techniques were associated with some true admissions, but also with false admissions. For example, youth who reported police refusing their requests (e.g., for a break) were at greater risk for both true and false confession, whereas youth who claimed to have experienced interrogations longer than 2 hr and those questioned in the presence of a friend were more likely to report only a false confession. Thus, lengthy interrogations, which seem prone to producing false confessions (Drizin & Leo, 2004), may be unnecessary for extracting true confessions from juveniles.

Limitations

The present study represents an initial effort to assess the self-reported interrogation, confession, and guilty plea experiences

of juveniles incarcerated for serious offenses in the United States. However, in part because data in this area are scarce, caution should be exercised when interpreting the results and generalizing to other populations. For example, data for the present study are based on self-report and we cannot independently verify youths' responses. However, given that youth were told explicitly that their responses were confidential and could not influence their future hearings or treatment, we have little reason to doubt the honesty of their reports. Indeed, youth revealed a considerable amount of personal information to interviewers, including information about their mental health, victimization experiences, and emotions, as well as their illegal drug use (53%), alcohol use (19%), and drug dealing (21%) in the facility. In addition, the fact that the self-reported rates of true admissions were considerably higher than self-reported rates of false admissions suggests that a desire to be seen as less antisocial was not a driving force behind these findings. Furthermore, self-reported number of arrests was strongly correlated with official prior charges, $r(164) = .44, p < .001$, suggesting that youth were attempting to be honest and accurate. (Note that youth may have had multiple charges per arrest.) Thus, although reliance on self-report of interrogation and other justice-system experiences has some drawbacks, including the possibility of bias—not only from self-presentation concerns but also as a result of self-serving memory distortions and reappraisals that are affected by outcomes—it also has some advantages. For example, a youth's subjective experience of his interrogation may be more predictive of subsequent events (e.g., false confession) than its objective characteristics (Gross & Thompson, 2009).

Another limitation of our study was that the sample included only male adolescents incarcerated for serious offenses. Consequently, the findings may not generalize to females or less serious juvenile offenders. Future research should examine these phenomena among additional samples of justice-system involved youth in the United States, including further exploration of gender differences. In addition, our questionnaires were limited in their focus and ability to detect some aspects of juveniles' experiences when questioned as suspects (e.g., deception, minimization). For instance, we were unable to distinguish between *interviews* and *interrogations* (Redlich et al., 2011). As these lines of questioning may be blurred for suspects (Leo, 2008), we chose to ask about all times youth had been questioned as a suspect. Unfortunately, this meant we were unable to tie specific questioning sessions to particular admissions. This will be a task for future studies.

Practical Implications and Future Directions

Our findings underscore the need for reform in policies regarding young suspects. Based on our findings and previous research, we have three key recommendations, which may need to be revised as additional research is conducted. First, law enforcement must proceed especially carefully when questioning juvenile suspects. In particular, our findings warn against lengthy interrogations of juveniles, depriving them of counsel or other requests, and questioning juveniles with a friend present. Special protections may be warranted (e.g., time limits on interrogations). As a minimum precaution, law enforcement should receive specialized training on questioning juvenile suspects. Surveys of law enforcement demonstrate that recognizing developmental differences between adolescents and adults does

not imply that this knowledge is applied to the interrogation context (Reppucci et al., 2010). It is imperative that training not only identify developmental differences but also focus on how these differences may play out in the interrogation room. Our findings indicate that such trainings may be beneficial for attorneys as well. Training police officers to conduct nonaccusatorial and nonconfrontational interrogations with juvenile suspects may prove to be the best course (e.g., Hershkowitz, Horowitz, Lamb, Orbach, & Sternberg, 2004).

Second, interrogations with juveniles should be video recorded, ideally with cameras set up to record the interrogator and the suspect with an equal-focus perspective for the full session (Kassin et al., 2010; Lassiter, 2010). The existence of objective records of interrogation sessions may help deter, prevent, and later detect the false admissions of juveniles, allowing fact finders the opportunity to make decisions based on direct observations of the interrogation techniques used, rather than potentially conflicting testimony about what occurred during the session.

Third, our findings serve as an urgent call for additional research on interrogations, confessions, and guilty pleas among youth. A great deal remains to be discovered about the ways in which lawyers' actions influence false guilty pleas and about motivations for false admissions (e.g., a suspect's desire to protect the real perpetrator) as well as retractions of false admissions. In addition, little is known about how retractions are perceived by fact finders, and whether retractions result in harsher sentences (Redlich et al., 2011). Multimethod approaches both in the laboratory and in naturalistic field settings will be needed to address these gaps.

As Kassin et al. (2010, p. 30) claim in the White Paper on police-induced false confessions,

There is a strong consensus among psychologists, legal scholars, and practitioners that juveniles and individuals with cognitive impairments or psychological disorders are particularly susceptible to false confession under pressure. Yet little action has been taken to modulate the methods by which these vulnerable groups are questioned when placed into custody as crime suspects.

Current interrogation procedures ignore (and perhaps even exploit) the developmental vulnerabilities of young suspects, which stands in contrast to the legal system's sensitivity to young victims and witnesses (Owen-Kostelnik et al., 2006). The current study provides clear evidence that adolescents are at risk for making false admissions to legal authorities. Additional experimental and field research is needed to identify the interrogation methods most effective and appropriate for use with adolescent suspects.

References

- Baldwin, J. (1993). Police interview techniques: Establishing truth or proof? *British Journal of Criminology*, *33*, 325–352.
- California Department of Corrections & Rehabilitation. (9/15/13). *Division of Juvenile Justice*. Retrieved from http://www.cdcr.ca.gov/Juvenile_Justice/index.html
- Cauffman, E., Shulman, E. P., Steinberg, L., Claus, E., Banich, M. T., Graham, S., & Woolard, J. (2010). Age differences in affective decision making as indexed by performance on the Iowa gambling task. *Developmental Psychology*, *46*, 193–207. doi:10.1037/a0016128

- Cauffman, E., & Steinberg, L. (2000). (Im)maturity of judgment in adolescence: Why adolescents may be less culpable than adults. *Behavioral Sciences & the Law*, *18*, 741–760. doi:10.1002/bsl.416
- Cohen, T. H., & Reaves, B. A. (2006). *Felony defendants in large urban counties, 2002*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. doi:10.1037/e513962006-001
- Drizin, S. A., & Leo, R. (2004). The problem of false confessions in the post-DNA world. *North Carolina Law Review*, *82*, 891–1008.
- Drizin, S. A., & Luloff, G. (2007). Are juvenile courts a breeding ground for wrongful convictions? *Northern Kentucky Law Review*, *34*, 257–322.
- Edmonds & Clay v. Oktibbeha County, Mississippi. No. 10–60957. (N. D. Miss., 2012).*
- Edmonds v. State of Mississippi, No. 2004-CT-02081-SCT. (Miss. S. Ct., 2007).*
- Fagan, J. (2008). Juvenile crime and criminal justice: Resolving border disputes. *The Future of Children*, *18*, 81–118. doi:10.1353/foc.0.0014
- Feld, B. (2006). Police interrogations of juveniles: An empirical study of policy and practice. *Journal of Criminal Law and Criminology*, *97*, 219–316.
- Feld, B. (2013). Real interrogation: What actually happens when cops question kids. *Law & Society Review*, *47*, 1–36. doi:10.1111/lasr.12000
- Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology*, *41*, 625–635. doi:10.1037/0012-1649.41.4.625
- Goldstein, N. E. S., Condie, L. O., Kalbeitzer, R., Osman, D., & Geier, J. L. (2003). Juvenile offenders' Miranda rights comprehension and self-reported likelihood of offering false confessions. *Assessment*, *10*, 359–369. doi:10.1177/1073191103259535
- Grisso, T., & Ring, J. (1979). Parents' attitudes toward juveniles' rights in interrogation. *Criminal Justice and Behavior*, *6*, 211–226. doi:10.1177/009385487900600301
- Grisso, T., Steinberg, L., Woolard, J., Cauffman, E., Scott, E., Graham, S., . . . Schwartz, R. (2003). Juveniles' competence to stand trial: A comparison of adolescents' and adults' capacities as trial defendants. *Law and Human Behavior*, *27*, 333–363. doi:10.1023/A:1024065015717
- Gross, J., & Thompson, R. (2009). Emotion regulation: Conceptual foundations. In J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3–24). New York, NY: Guilford Press.
- Gross, S. R., Jacoby, K., Matheson, D. J., Montgomery, N., & Patil, S. (2005). Exonerations in the United States 1989 through 2003. *Journal of Criminal Law & Criminology*, *95*, 523–560.
- Gudjonsson, G. H. (2003). *The psychology of interrogations and confessions*. Chichester, UK: Wiley. doi:10.1002/9780470713297
- Gudjonsson, G. H. (2010). The psychology of false confessions: A review of the current evidence. In G. D. Lassiter & C. A. Meissner (Eds.), *Police interrogations and false confessions: Current research, practice, and policy recommendations* (pp. 31–47). Washington, DC: American Psychological Association. doi:10.1037/12085-002
- Gudjonsson, G. H., & Pearse, J. (2011). Suspect interviews and false confessions. *Current Directions in Psychological Science*, *20*, 33–37. doi:10.1177/0963721410396824
- Gudjonsson, G. H., Sigurdsson, J. F., Asgeirsdottir, B. B., & Sigfusdottir, I. D. (2006). Custodial interrogation, false confession and individual differences: A national study among Icelandic youth. *Personality and Individual Differences*, *41*, 49–59. doi:10.1016/j.paid.2005.12.012
- Gudjonsson, G. H., Sigurdsson, J. F., & Sigfusdottir, I. D. (2009). Interrogation and false confessions in seven European countries. What background and psychological variables best discriminate between false confessors and non-false confessors? *Psychology, Crime, & Law*, *15*, 711–728. doi:10.1080/10683160802516257
- Gudjonsson, G. H., Sigurdsson, J. F., Sigfusdottir, I. D., & Young, S. (2012). False confessions to police and their relationship with conduct disorder, ADHD, and life adversity. *Personality and Individual Differences*, *52*, 696–701. doi:10.1016/j.paid.2011.12.025
- Hasel, L. E., & Kassin, S. M. (2009). On the presumption of evidentiary independence: Can confessions corrupt eyewitness identifications? *Psychological Science*, *20*, 122–126. doi:10.1111/j.1467-9280.2008.02262.x
- Hershkowitz, I., Horowitz, D., Lamb, M. E., Orbach, Y., & Sternberg, K. J. (2004). Interviewing youthful suspects in alleged sex crimes: A descriptive analysis. *Child Abuse & Neglect*, *28*, 423–438. doi:10.1016/j.chiabu.2003.09.021
- Honts, C. R., Kassin, S. M., & Craig, R. (2013). "I'd know a false confession if I saw one": A constructive replication with juveniles. Manuscript submitted for publication.
- Honts, C. R., Kassin, S., & Forrest, K. D. (2009, March). *Polygraph examiners unable to discriminate true and false juvenile confessions: Reid training detrimental*. Paper presented at the annual meeting of the American Psychology-Law Society, San Antonio, TX.
- Inbau, F. E., Reid, J. E., Buckley, J. P., & Jayne, B. C. (2013). *Criminal interrogation and confessions* (5th ed.). Burlington, MA: Jones & Bartlett Learning.
- Innocence Project. (n.d.). *False confessions*. Retrieved from <http://www.innocenceproject.org/understand/False-Confessions.php>
- J.D.B. v. North Carolina, 131 S. Ct. 2394 (2011).*
- Kassin, S. M., Bogart, D., & Kerner, J. (2012). Confessions that corrupt: Evidence from the DNA exoneration case files. *Psychological Science*, *23*, 41–45. doi:10.1177/0956797611422918
- Kassin, S. M., Drizin, S. A., Grisso, T., Gudjonsson, G. H., Leo, R. A., & Redlich, A. D. (2010). Police-induced confessions: Risk factors and recommendations. *Law and Human Behavior*, *34*, 3–38. doi:10.1007/s10979-009-9188-6
- Kassin, S. M., & McNall, K. (1991). Police interrogations and confessions: Communicating promises and threats by pragmatic implication. *Law and Human Behavior*, *15*, 233–251. doi:10.1007/BF01061711
- Kassin, S. M., Meissner, C. A., & Norwick, R. J. (2005). "I'd know a false confession if I saw one": A comparative study of college students and police investigators. *Law and Human Behavior*, *29*, 211–227. doi:10.1007/s10979-005-2416-9
- Lassiter, G. D. (2010). Videotaped interrogations and confessions: What's obvious in hindsight may not be in foresight. *Law and Human Behavior*, *34*, 41–42. doi:10.1007/s10979-009-9202-z
- Lassiter, G. D., & Meissner, C. A. (Eds.). (2010). *Police interrogations and false confessions: Current research, practice, and policy recommendations*. Washington, DC: American Psychological Association. doi:10.1037/12085-000
- Leo, R. A. (1996). Inside the interrogation room. *Journal of Criminal Law and Criminology*, *86*, 266–303. doi:10.2307/1144028
- Leo, R. A. (2008). *Police interrogation and American justice*. Cambridge, MA: Harvard University Press.
- Ofshe, R., & Leo, R. (1997). The decision to confess falsely: Rational choice and irrational action. *Denver University Law Review*, *74*, 979–1122.
- Owen-Kostelnik, J., Reppucci, N. D., & Meyer, J. R. (2006). Testimony and interrogation of minors: Assumptions about maturity and morality. *American Psychologist*, *61*, 286–304. doi:10.1037/0003-066X.61.4.286
- Redlich, A. D. (2004). Mental illness, police interrogations, and the potential for false confession. *Psychiatric Services*, *55*, 19–21. doi:10.1176/appi.ps.55.1.19
- Redlich, A. D. (2007). Double jeopardy in the interrogation room for youths with mental illness. *American Psychologist*, *62*, 609–611. doi:10.1037/0003-066X62.6.609
- Redlich, A. D. (2010a). False confessions, false guilty pleas: Similarities and differences. In G. D. Lassiter & C. A. Meissner, (Eds.), *Police interrogations and false confessions: Current research, practice, and*

- policy recommendations (pp. 49–66). Washington, DC: American Psychological Association. doi:10.1037/12085-003
- Redlich, A. D. (2010b). The susceptibility of juveniles to false confessions and false guilty pleas. *Rutgers Law Review*, *62*, 943–957.
- Redlich, A. D., & Goodman, G. S. (2003). Taking responsibility for an act not committed: The influence of age and suggestibility. *Law and Human Behavior*, *27*, 141–156. doi:10.1023/A:1022543012851
- Redlich, A. D., Kulish, R., & Steadman, H. J. (2011). Comparing true and false confessions among persons with serious mental illness. *Psychology, Public Policy, and Law*, *17*, 394–418. doi:10.1037/a0022918
- Redlich, A. D., Summers, A., & Hoover, S. (2010). Self-reported false confessions and false guilty pleas among offenders with mental illness. *Law and Human Behavior*, *34*, 79–90. doi:10.1007/s10979-009-9194-8
- Reppucci, N. D., Meyer, J., & Kostelnik, J. (2010). Custodial interrogation of juveniles: Results of a national survey of police. In G. D. Lassiter & C. A. Meissner (Eds.), *Police interrogations and false confessions* (pp. 67–80). Washington, DC: American Psychological Association. doi:10.1037/12085-004
- Russano, M. B., Meissner, C. A., Narchet, F. M., & Kassir, S. M. (2005). Investigating true and false confessions within a novel experimental paradigm. *Psychological Science*, *16*, 481–486. doi:10.1111/j.0956-7976.2005.01560.x
- Scott, J. (2000). Rational choice theory. In G. Browning, A. Halcli, & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126–138). Thousand Oaks, CA: Sage. doi:10.4135/9781446218310.n9
- Sigurdsson, J. F., & Gudjonsson, G. H. (1996). The psychological characteristics of “false confessors”. A study among Icelandic prison inmates and juvenile offenders. *Personality and Individual Differences*, *20*, 321–329. doi:10.1016/0191-8869(95)00184-0
- Steinberg, L. (2009). Adolescent development and juvenile justice. *Annual Review of Clinical Psychology*, *5*, 459–485. doi:10.1146/annurev.clinpsy.032408.153603
- Steinberg, L., Graham, S., O’Brien, L., Woolard, J., Cauffman, E., & Banich, M. (2009). Age differences in future orientation and delay discounting. *Child Development*, *80*, 28–44. doi:10.1111/j.1467-8624.2008.01244.x
- Thomas, G. C., III, & Leo, R. A. (2012). *Confessions of guilt: From torture to Miranda and beyond*. New York, NY: Oxford University Press. doi:10.1093/acprof:oso/9780195338935.001.0001
- U.S. Department of Justice, Federal Bureau of Investigation. (2011). *Crime in the United States, 2010*. Retrieved from <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010>
- Viljoen, J. L., Klaver, J., & Roesch, R. (2005). Legal decisions of preadolescent and adolescent defendants: Predictors of confessions, pleas, communication with attorneys, and appeals. *Law and Human Behavior*, *29*, 253–277. doi:10.1007/s10979-005-3613-2
- Warr, M. (1993). Age, peers, and delinquency. *Criminology*, *31*, 17–40. doi:10.1111/j.1745-9125.1993.tb01120.x
- White, W. S. (2001). *Miranda’s waning protections: Police interrogation practices after Dickerson*. Ann Arbor, MI: University of Michigan Press.
- Woolard, J. L., Cleary, H. M. D., Harvell, S. A. S., & Chen, R. (2008). Examining adolescents’ and their parents’ conceptual and practical knowledge of police interrogation: A family dyad approach. *Journal of Youth and Adolescence*, *37*, 685–698. doi:10.1007/s10964-008-9288-5
- Zimring, F. E., Hawkins, G., & Kamin, S. (2001). *Punishment and democracy: Three strikes and you’re out in California*. New York, NY: Oxford University Press.

Received April 8, 2013

Revision received August 30, 2013

Accepted September 1, 2013 ■